



Prof. Xie Dejun

謝德軍 教授

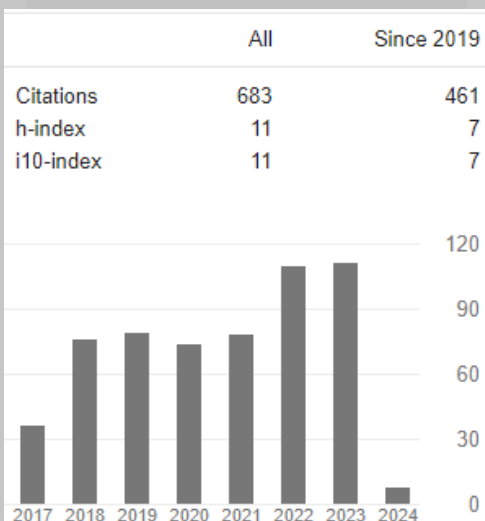
(Professor)

Email: djxie@cityu.edu.mo

Research Area

Application of quantitative methods such as mathematics, statistics, and scientific computing in finance, economics, business analysis, and other interdisciplinary disciplines.

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Journal

- ◆ Zhao, C., Xie, D., & Chen, Z. (2024). A Survey of Systemic Risk in Banking Industry, *Journal of Electronic Finance*, 13 (1), 103-120.
- ◆ Liu, Y. Xie, D., Li, Y., & Li, S. (2023). Nonparametric Bayesian modeling on infinite mixture Student t copulas, *Communications in Statistics - Simulation and Computation*, 1-19, DOI: 10.1080/03610918.2023.2263184.
- ◆ Liu, Y., Xie, D., & Edwards, D. (2023). Mixture copulas with discrete margins and their application to imbalanced data. *J. Korean Stat. Soc.* 52(4), 878-900.
- ◆ Liu, Y. Xie, D., & Li, Y. (2023). Implications of imbalanced datasets for empirical ROC-AUC estimation in binary classification tasks, *Journal of Statistical Computation and Simulation*, 1-21, DOI: 10.1080/00949655.2023.2238235.
- ◆ Liu, Y., Xie, D., & Yu, S. (2023). Bayesian Mixture Copula Estimation and Selection with Applications, *Analytics 2* (2), 530-545.
- ◆ Xie, D., Cui, Y., & Liu, Y. (2023). How does investor sentiment impact stock volatility? New evidence from Shanghai A-shares market. *China Finance Review International*, 13 (1), 102-120.
- ◆ Xie, D., Edwards, D., & Wu, X. (2022). Optimal exercise frontier of Bermudan options by simulation methods. *International Journal of Financial Engineering*, 9 (3), DOI: 10.1142/S242478632250013X.
- ◆ Zhang, T., Zhu, X., Xie, D., Su, F., & Balakrishnan, N. (2022). Test of equality of proportional hazard models with jointly censored data, *International Journal of Data Science* 7 (1), 1-21.
- ◆ Xie, D., Wang, R., Shen, S., Zhou, W., & Li, X. (2022) Customer satisfaction analysis in bike sharing. *International Journal of Green Economics*, 16 (1), 36-55.
- ◆ Zhao, M. Xie, D., Edwards, D., & Liu, Y. (2022). A VAR-based factor decomposition to the term structure of treasury bonds. *International Journal of Monetary Economics and Finance*, 15(6), 585-613.



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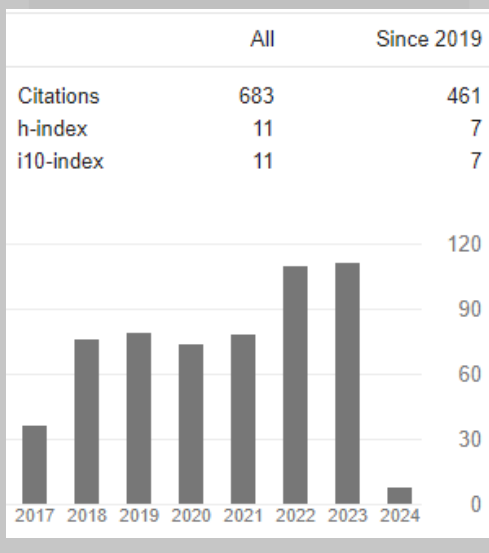
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- ◆ Zhu, J., Xie, D., Liu, G., & Ma, F. (2021). An XVA approach to counterparty risk appraisal. *Current Chinese Computer Science*, 10.2174/2665997201999200909124001
- ◆ Shen S., Xie, D., Liu, G., Wen, C. & Ma, F. (2020). AMOS Based Analysis of User Satisfaction of Bike Sharing Services. *Journal of Statistical and Econometric Methods*. 9(2), 2020, 45-65.
- ◆ Wang, X., Zhai, J., Xie. D., & Jiang, J. (2019). The impact of monetary policy on option-implied stock market expectations. *China Finance Review International*, 10(1), 37-51. <https://doi.org/10.1108/CFRI-07-2018-0068>.
- ◆ Wu, X., Xie, D., & Edwards, D. (2019) An Optimal Refinancing Strategy with Stochastic Interest Rate, *Computational Economics*, 53 (4), 1353-1375.
- ◆ Shen, B. Shan, Y., Jia, Y. ,Xie, D., & Zhu., S. (2019). Modeling the Cashflow Management of Bike Sharing Industry. *Lecture Notes in Business Information Processing*. 354, 132-146.
- ◆ Xie, D., Zhang, N., & Edwards, D. (2018), Simulation Solution to a Two-Dimensional Mortgage Refinancing Problem. *Computational Economics*, 52 (2), 479-492.
- ◆ Feng, F., Xie, D., & Chong, W. K. (2017), Interconnectedness Analysis of Second Board Markets, *International Journal of Design, Analysis & Tools for Integrated Circuits & Systems*, 6 (1). 26-29.
- ◆ Jiang, J., Ye, B., Xie, D., Li, J., Miao, L., & Yang, P. (2017). Sector Decomposition of China's National Economic Carbon Emission and Its Policy Implication for National ETS Development, *Renewable and Sustainable Energy Reviews*, 75, 855-867. DOI: <http://dx.doi.org/10.1016/j.rser.2016.11.066>
- ◆ Wang, X., Xie, D., Jiang, J., Wu, X., & He, J. (2017). Value-at-Risk Estimation with Stochastic Interest Rate Model for Option-Bond Portfolios. *Financial Research Letters*, 21, 10-20.
- ◆ Ye, B., Jiang, J., Miao, L., & Xie, D. (2017), Interprovincial Allocation of China's National Carbon Emission Allowance: An Uncertainty Analysis Based on Monte-Carlo Simulations. *Climate Policy*, 17(4), 401-422.
- ◆ Jiang, J., Xie, D., Ye, B., Shen, B., & Chen, Z. (2016). Research on China's Cap-and-Trade Carbon Emission Trading Scheme: Overview and Outlook. *Applied Energy*, 178, 902-917.



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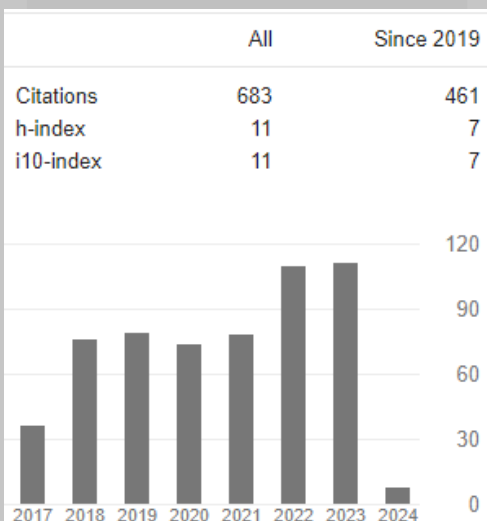
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- ◆ Xie, D., & Zhang, S. (2016). Semi Discrete Model for Mortgage Valuation and its Computation by an Adaptive Finite Element Method, *International Journal of Numerical Analysis and Modeling*, 6(13), 831-851.
- ◆ Wang, X., Xie, D., Jiang, J., & He, J. (2016). Value-at-Risk Estimation with Stochastic Interest Rate Model for Option-Bond Portfolios. *Financial Research Letters*. DOI:<http://dx.doi.org/10.1016/j.frl.2016.11.013>
- ◆ Jiang, J., Ye, B., Xie, D., & Miao, L. (2015). Dynamic Nonlinear Relationships between Carbon Emission Allowance and Reduction Credit Markets-Based on the IRF-DCC Model. *Geo-Informatics in Resource Management and Sustainable Ecosystem*, 770-777.
- ◆ Dai, W., Xie, D., & Sun, B. (2015). Intraday Periodicity and Long Memory Volatility in Hong Kong Stock Market. *Open Journal of Social Sciences*, 3, 61-66.
- ◆ Zhang, N., Man, K. L., & Xie, D. (2014). Computing Value at Risk in OpenCL on the Graphics Processing Unit. *Lecture Notes in Electrical Engineering*, 329, 71-78.
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- ◆ Dai, W. (2014). An Analysis of Factors Impacting the Housing Prices in China's Market. *Finance Economy*, 9, 16-20.
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- ◆ Xie, D., Edwards, D., Gilberto, S., & Zhu, Q. (2011). Characterization of the American Put Option Using Convexity. *Applied Mathematical Finance*, 18, 353-365. <https://core.ac.uk/display/6932259>, DOI:10.1080/1350486X.2010.524359;
- ◆ Xie, D., Edwards, D., & Gilberto, S. (2009). An Asymptotic Method to a Financial Optimization Problem, *Advances in Machine Learning and Data Analysis*, S. Ao, et al. (eds.), New York: Springer (2009), 79-94.
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- ◆ Xie, D. (2008). Numerical Valuation of Fixed Rate Mortgages. *International Journal of Applied Mathematics*, 38, 89-98.
- ◆ Xie, D., Chen, X., & Chadam, J. (2007). Optimal Payment of Mortgages, *European Journal of Applied Mathematics*, 18, 363-388.



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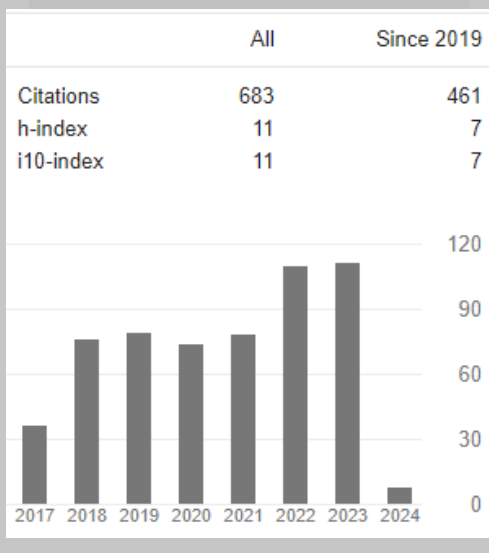
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Proceeding

- ◆ Guo, X., & Xie, D. (2021). Optimizing the design of recommendation systems. *ACM International Conference Proceeding Series*, 79-84. DOI: 10.1145/3479162.3479174.
- ◆ Shan, Y., Xie, D., & Zhang, R. (2019). A Multi-Objective Optimization Model for Bike-Sharing. *Proceedings of The 7th International Conference on Information Technology*, 383-387.
- ◆ Shen, B. Shan, Y., Jia, Y., Xie, D., & Zhu., S. (2019). Modeling the Cashflow Management of Bike Sharing Industry. *Lecture Notes in Business Information Processing*. 354, 132-146.
- ◆ Management of Bike Sharing Industry. *Lecture Notes in Business Information Processing*. 354, 132-146.
- ◆ Ye, B., & Xie, D. (2018). An Overview of Event Based Directional Change for Algorithmic Trading. *Proceedings of 16th International Conference on Software Engineering Research, Management and Applications (SERA)*, 13-18. DOI:10.1109/SERA.2018.8477229.
- ◆ Sun, Y., Chong, W. K., Man, K. L., Rho, S., & Xie, D. (2016). Exploring Critical Success Factors of Mobile Recommendation Systems: The End User Perspective. In: G.C. Yang, S.I. Ao, X. Huang, O. Castillo (eds.), *Transactions on Engineering Technologies, International MultiConference of Engineers and Computer Scientists*, Springer, Heidelberg, German.
- ◆ Chen, X., & Xie, D. (2016). How Responsive is China's Stock Market to the Monetary Policies. *Proceedings of the International MultiConference of Engineers and Computer Scientists, IAENG*.